

IN THE CLAIMS

1 (Currently Amended). A planar light wave circuit comprising:
a substrate;

a pair of waveguides formed on said substrate; and
a coupling region wherein said waveguides extend parallel to one another without touching but close enough to enable coupling between the waveguides formed between said waveguides, at least one of said waveguides being segmented in said coupling region, said waveguides including gaps along their lengths in the coupling region.

2 (Original). The circuit of claim 1 wherein both of said pair of waveguides are segmented in said coupling region.

3 (Original). The circuit of claim 1 wherein one of said waveguides are segmented by having at least two gaps along the length of said waveguide in said coupling region.

4 (Original). The circuit of claim 3 wherein said gaps are irregularly sized along the length of said coupling region.

5 (Original). The circuit of claim 3 wherein said gaps are regularly sized along the length of said coupling region.

6 (Original). A method comprising:

coupling a pair of light signals in a coupling region along two planar waveguides;
and

using gaps between segments along the length of said coupling region to control the coupling of signals between said waveguides.

7 (Original). The method of claim 6 including forming a segmented coupling region between said two planar waveguides.

8 (Original). The method of claim 6 including segmenting both of said waveguides.

9 (Original). The method of claim 6 including forming gaps of irregular size along the length of the coupling region.

10 (Original). The method of claim 6 including forming gaps of regular size along the length of said coupling region.

11 (Currently Amended). An optical circuit comprising:

a substrate;

a pair of planar waveguides formed on said substrate; and

~~each of said waveguides including a segmented region including waveguide portions separated from one another by gaps to form a coupling region of each waveguide, said coupling region of each waveguide being juxtaposed with the coupling region of the other waveguide~~

a coupling region where a portion of each waveguide extends parallel to the other portion and close enough for coupling to occur, said portions including gaps along their lengths in the coupling region.

12 (Original). The circuit of claim 11 wherein each of said waveguides includes at least two gaps.

13 (Original). The circuit of claim 11 wherein said circuit is a planar light wave circuit.

14 (Original). The circuit of claim 11 wherein said gaps are regularly sized along the length of each waveguide.

15 (Original). The circuit of claim 11 wherein said gaps are irregularly sized along the length of each waveguide.

16 (Original). The circuit of claim 11 wherein said gaps are arranged to improve the coupling between said waveguides.